

In the Claims

For the convenience of the Examiner, all pending claims are set forth below, whether or not an amendment has been made. Please refer to Appendix B for mark-ups reflecting changes to the claims. Please amend the claims as follows:

DLH 1. **(Amended)** A method for configuring a product, comprising:
initiating a session in which a user configures a product comprising a configuration of items selected from a plurality of items;
generating a series of selection option sets, each selection option set comprising one or more items;
for at least one of the series of selection option sets, applying an optimization function with respect to each item in the selection option set to identify an item of the selection option set as a default selection, the default selection being optimal among the one or more items of the selection option set with respect to the optimization function;
B2 providing for presentation to the user the series of selection option sets, including the selection option set comprising the identified default selection;
accepting from the user a selection of an item for each of the series of selection option sets; and
determining a configuration for the product in accordance with the selections of the items from the series of selection option sets.

2. **(Amended)** The method of Claim 1, wherein each selection option set presented to the user is checked before presentation to confirm that all items in the selection option set are actually available to the user in accordance with a user-specified date constraint.

3. **(Amended)** The method of Claim 1, wherein identifying an item of the selection option set as a default selection comprises identifying the item that provides an optimized fit according to the optimization function.

4. **(Amended)** The method of Claim 1, wherein the optimization function ~~maximizes manufacturer profit~~

6. (Amended) The method of Claim 1, wherein the optimization function minimizes price to the user.

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sub (i) 7. (Amended) The method of Claim 1, wherein the optimization function is defined during the session.

8. (Amended) The method of Claim 1, wherein the optimization function is defined in response to an identification of the user.

9. (Amended) The method of Claim 1, wherein the optimization function is defined in response to a product selection decision made by the user.

10. **(Amended)** A method for configuring a product, comprising:
providing for presentation to a user a series of selection option sets, each selection option set comprising one or more items;
for each selection option set, before presenting the selection option set to the user, determining which of the items of the selection option set are actually available to the user in accordance with a user-specified date constraint and presenting only those items of the selection option set which are actually available to the user in accordance with the user-specified date constraint;
for at least one of the selection option sets, identifying as a default selection an item that provides an optimized result according to a preselected optimization function; and
for each selection option set, accepting a selection of an item from the user.

11. **(Amended)** The method of Claim 10, further comprising:
before any selection option sets are presented to the user, defining configuration information to provide the series of selection option sets to be presented to configure the product; and
within the determining step, determining which of the items in the defined configuration information are actually available to the user.

12. **(Amended)** The method of Claim 11, further comprising:
as selections are made by the user, adding one or more constraints to later presented selection option sets; and
within the determining step, determining which of the items in the defined configuration information meet the one or more constraints added by user selections and are ~~actually available to the user.~~

13. **(Amended)** The method of Claim 10, wherein the preselected optimization function is selected during a session with the user in which the product configuration is performed.

14. **(Amended)** The method of Claim 13, wherein the preselected optimization function is selected as a function of an identity of the user.

15. **(Amended)** The method of Claim 13, wherein the preselected optimization function is selected by the user.

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16. **(Amended)** The method of Claim 10, wherein the default selection provides an optimized result according to a second optimization function in addition to the preselected optimization function.

17. **(Amended)** The method of Claim 10, wherein the preselected optimization function comprises a function which minimizes price to the user.

Part C1
18. **(Amended)** The method of Claim 10, wherein the preselected optimization function comprises a function which maximizes profit to a manufacturer.

19. **(Amended)** The method of Claim 10, wherein the preselected optimization function comprises a function which minimizes time to delivery of the product.

20. **(Amended)** A system for configuring a product, comprising:
a configuration engine operable to:

communicate with a user interface operable to display a plurality of lists of items to a user and to accept a plurality of selections from the user, each list comprising one or more items, at least one list comprising a default item; and

generate the lists of items according to stored configuration information; and
an available to promise engine operable to:

store information regarding availability of the items in the lists of items generated by the configuration engine; and

for each list of items generated by the configuration engine, return to the configuration engine a list of one or more of the items which are actually available to the user in accordance with a user-specified date constraint;

the default item for the at least one list being determined by applying an optimization function to the returned list of one or more of the items which are actually available to the user in accordance with the user-specified date constraint, the default item for the at least one list being optimal among the one or more items in the at least one list with respect to the optimization function.

21. **(Amended)** The system of Claim 20, wherein the configuration engine is operable to determine the lists of items in response to selections made by the user.

22. **(Amended)** The system of Claim 21, wherein the configuration engine is operable to apply the optimization function to the list of actually available items returned from the available to promise engine.

23. **(Amended)** The system of Claim 21, wherein the available to promise engine is operable to:

apply the optimization function to the items which are actually available before returning the list to the configuration engine; and

identify the default item when the list of actually available items is returned.

24. **(Amended)** The system of Claim 21, wherein:
for each list of items to be displayed to the user, the configuration engine is operable
to pass to the available to promise engine a list of proper configuration items; and
for each list of proper configuration items, the available to promise engine is operable
to:
determine which items are actually available to the user;
apply the optimization function to each available item; and
return to the configuration engine a list of available items and an identification
of which item best matches the optimization function.

25. **(Amended)** The system of Claim 20, wherein the optimization function
comprises a function for minimizing product price.

26. **(Amended)** The system of Claim 20, wherein the optimization function
comprises a function for maximizing profits.

27. **(Amended)** The system of Claim 20, wherein the optimization function
comprises a function for minimizing delay until the product is available.

28. (Amended) A method for configuring a product, comprising:
initiating a session in which a user configures a product, the product comprising a configuration of items selected from a series of lists, each list comprising one or more items selected from a plurality of items;
for at least one of the series of lists, applying an optimization function with respect to each item in the list to identify a default selection comprising an item of the list that optimizes the optimization function relative to any other items in the list;
providing for presentation to the user the list comprising the one or more items and including the identified default selection for the list; and
determining a configuration for the product in accordance with the selection of items from the series of lists.

29. (Amended) The method of Claim 28, further comprising repeating the following for each list of the series of lists until a last list is reached:
receiving from the user a selection of an item from a current list comprising one or more items;
generating a next list comprising one or more items in accordance with the selection of the item from the current list;
applying an optimization function with respect to each item in the next list to identify a default selection comprising an item of the next list that optimizes the optimization function relative to any other items in the next list; and
providing for presentation to the user the next list comprising the one or more items and including the identified default selection for the next list.

30. The method of Claim 28, wherein generating the next list comprises:
determining a valid item configuration for the product in accordance with the selection of the item from the current list and in accordance with a constraint restricting selection of an item for the product; and
generating the next list comprising only one or more items of the valid item configuration.

31. (Amended) The method of Claim 28, wherein generating the next list comprises:

33 36 determining one or more items of the next list that are actually available to the user in accordance with a user-supplied date constraint restricting selection of an item for the product; and

generating the next list comprising only the one or more items of the next list that are actually available to the user in accordance with the user-supplied date constraint restricting selection of an item for the product.

32. The method of Claim 28, wherein the optimization function comprises a function for minimizing product price.

33. The method of Claim 28, wherein the optimization function comprises a function for maximizing profits.

34. The method of Claim 28, wherein the optimization function is selected as a function of an identity of the user.

35. The method of Claim 28, wherein the optimization function is selected by the user.

subcl 36. **(Amended)** A system for configuring a product, the system comprising one or more software components embodied in computer-readable media that when executed are collectively operable to:

initiate a session in which a user configures a product, the product comprising a configuration of items selected from a series of lists, each list comprising one or more items selected from a plurality of items;

for at least one of the series of lists, apply an optimization function with respect to each item in the list to identify a default selection comprising an item of the list that optimizes the optimization function relative to any other items in the list;

provide for presentation to the user the list comprising the one or more items and including the identified default selection for the list; and

B4 determine a configuration for the product in accordance with the selection of items from the series of lists.

37. **(Amended)** The system of Claim 36, operable to repeat the following for each list of the series of lists until a last list is reached:

receiving from the user a selection of an item from a current list comprising one or more items;

generating a next list comprising one or more items in accordance with the selection of the item from the current list;

applying an optimization function with respect to each item in the next list to identify a default selection comprising an item of the next list that optimizes the optimization function relative to any other items in the next list; and

providing for presentation to the user the next list comprising the one or more items and including the identified default selection for the next list.

38. The system of Claim 36, operable to generate the next list by:

determining a valid item configuration for the product in accordance with the selection of the item from the current list and in accordance with a constraint restricting selection of an item for the product; and

generating the next list comprising only one or more items of the valid item configuration.

39. (Amended) The system of Claim 36, operable to generate the next list by:
determining one or more items of the next list that are actually available to the user in
accordance with a user-supplied date constraint restricting selection of an item for the
product; and
generating the next list comprising only the one or more items of the next list that are
actually available to the user in accordance with the user-supplied date constraint restricting
selection of an item for the product.

40. The system of Claim 36, wherein the optimization function comprises a
function for minimizing product price.

41. The system of Claim 36, wherein the optimization function comprises a
function for maximizing profits.

42. The system of Claim 36, wherein the optimization function is selected as a
function of an identity of the user.

43. The system of Claim 36, wherein the optimization function is selected by the
user.